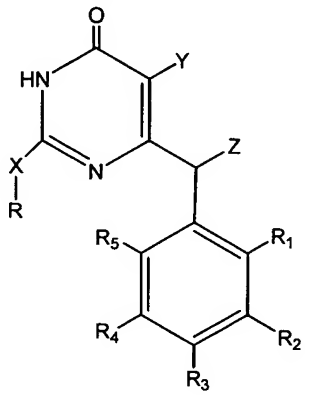
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): A compound of the formula:



(A)

wherein:

X is -O, -CH_2, -CHK (wherein K is -H, -C_{1-4}alkyl, -C_{3-6}cycloalkyl), -S, ~~-NK (wherein K is -H, -C_{1-4}alkyl, -C_{3-6}cycloalkyl),~~ -aryl, -arylalkyl;

R is -H, -C_{1-4}alkyl (containing one or more of heteroatoms like O, S, N), -C_{3-6}cycloalkyl (containing one or more of heteroatoms like O, S, N), -aryl, arylalkyl, heterocycle;

Y is -H, -C_{1-4}alkyl, -C_{3-6}cycloalkyl;

Z is -H, -C_{1-4}alkyl, -C_{3-6}cycloalkyl;

R_1 is -H_1 -C_{1-4}alkyl, halogen, -NO_2, -OW (wherein W is -H, -CH_3, -aryl), -SW (wherein W is -H, -CH_3, -aryl);

R_2 is -H, -C_{1-4}alkyl, -halogen, -NO_2, -OW (wherein W is -H, -CH_3, -aryl), -SW (wherein W is -H, -CH_3, -aryl);

R_3 is -H, -C_{1-4}alkyl, -halogen, -NO_2, -OW (wherein W is -H, -CH_3, aryl), -SW (wherein W is -H, -CH_3, -aryl);

R_4 is -H, -C_{1-4}alkyl, -halogen, -NO_2, -OW (wherein W is -H, -CH_3, -aryl), -SW (wherein W is -H, -CH_3, -aryl);

R_5 is -H, -C_{1-4}alkyl, -halogen, -NO_2, -OW (wherein W is -H, -CH_3, -aryl), -SW (wherein W is -H, -CH_3, -aryl), or a pharmaceutically acceptable salt or soluble derivative thereof.

Claim 2 (currently amended): A compound having formula A as claimed in claim 1 wherein

X = O, Y = H, Z = H, R = *s*Bu, R_1 = F, R_2 = H, R_3 = H, R_4 = H, R_5 = F; or

X = O, Y = H, Z = H, R = *c*Pen, R_1 = F, R_2 = H, R_3 = H, R_4 = H, R_5 = F.

Claim 3 (previously presented): A compound having formula A as claimed in claim 1 wherein

X = S	Y = H	Z = H	R = *s*Bu	R_1 = NO_2	R_2 = H	R_3 = H	R_4 = H	R_5 = H
X = S	Y = H	Z = H	R = *s*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = H
X = S	Y = H	Z = H	R = CH_3	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = H	R = /pr	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = H	R = *n*Bu	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = H	R = *i*Bu	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = H	R = *s*Bu	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = H	R = *c*Pen	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = H	R = *c*Es	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = H	R = CH_3	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = H	R = *i*Pr	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = H	R = *n*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = H	R = *i*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = H	R = *s*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = H	R = *c*Pen	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = H	R = *c*Es	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = CH_3	R = *i*Pr	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = CH_3	R = *c*Pen	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = CH_3	R = *c*Es	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = Et	R = *i*Pr	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = Et	R = *c*Pen	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl

X = S	Y = H	Z = Et	R = *c*Es	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = H	Z = CH_3	R = *i*Pr	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = CH_3	R = *i*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = CH_3	R = *n*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = CH_3	R = *s*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = CH_3	R = *c*Pen	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = CH_3	R = *c*Es	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = Et	R = *i*Pr	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = Et	R = *c*Pen	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = H	Z = Et	R = *c*Es	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X=S	Y=H	Z=CH_3	R= *c*Es	-CH=CH-CH=CH		R_3=H	R_4=H	R_5=H
X = S	Y = H	Z = H	R = *s*Bu	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = H
X = S	Y = CH_3	Z = H	R = *s*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = H
X = S	Y = CH_3	Z = H	R = *s*Bu	R_1 = Cl	R_2 = H	R_3 = H	R_4 = H	R_5 = Cl
X = S	Y = CH_3	Z = H	R = CH_3	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = H	R = *i*Pr	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = H	R = *n*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = H	R = *i*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = H	R = *s*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = H	R = *c*Pen	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = H	R = *c*Es	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = CH_3	R = CH_3	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = CH_3	R = *s*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = CH_3	R = *c*Pe	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = Et	Z = H	R = *s*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = *i*Pr	Z = H	R = *i*Pr	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = CH_3	R = *i*Pr	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = CH_3	R = *n*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = CH_3	R = *i*Bu	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F
X = S	Y = CH_3	Z = CH_3	R = *c*Es	R_1 = F	R_2 = H	R_3 = H	R_4 = H	R_5 = F

X = S	Y = H	Z = H	R=MeSMeR$_1$ = F	R$_2$ = H	R$_3$ = H	R$_4$ = H	R$_5$ = F
X = S	Y = CH_3	Z = H	R=MeSMeR$_1$ = F	R$_2$ = H	R$_3$ = H	R$_4$ = H	R$_5$ = F
X = S	Y = Et	Z = H	R=MeSMeR$_1$ = F	R$_2$ = H	R$_3$ = H	R$_4$ = H	R$_5$ = F
X = S	Y = *i*Pr	Z = H	R=MeSMeR$_1$ = F	R$_2$ = H	R$_3$ = H	R$_4$ = H	R$_5$ = F.

Claim 4 (cancelled)

Claim 5 (previously presented): A pharmaceutically acceptable salt or soluble derivative of a compound of claim 1.

Claim 6 (previously presented): A process for the preparation of a compound having formula A as claimed in claim 1 wherein X = 0, wherein the proper methyl arylacetylalkylacetate is reacted with O-methylisourea in presence of calcium hydroxide; the so obtained 2-O-methyl(5-alkyl)-6-benzyl(substituted)uracils are reacted with the proper potassium alkoxide according to scheme A.

Claim 7 (previously presented): A process for the preparation of a compound having formula A as claimed in claim 1 wherein X = S, wherein the proper ethyl arylacetylalkylacetate is reacted with thiourea in presence of sodium methoxide; the so obtained 5-alkyl-6-benzyl(substituted)2-thiouracils are reacted with methyl iodide or with an alkyl halide in a basic medium according to scheme B.

Claim 8 (cancelled)

Claim 9 (previously presented): A method of preventing infection of HIV, or of treating infection by HIV or of treating AIDS, comprising administering to a mammal an effective amount of a compound as claimed in claim 1 or a pharmaceutically acceptable salt or soluble derivative thereof.

Claim 10 (previously presented): A pharmaceutical composition useful for inhibiting HIV reverse transcriptase, comprising an effective amount of a compound claimed in claim 1 or a pharmaceutically acceptable salt or soluble derivative thereof, and a pharmaceutically acceptable carrier.

Claim 11 (previously presented): A pharmaceutical composition useful for preventing or treating infection of HIV or for treating AIDS, comprising an effective amount of a compound as claimed in claim 1 or a pharmaceutically acceptable salt or soluble derivative thereof, and a pharmaceutically acceptable carrier.

Claim 12 (previously presented): A method of preventing infection of HIV, or of treating infection by HIV or of treating AIDS, comprising administering to a mammal an effective amount of a compound as claimed in claim 1 or a pharmaceutically acceptable salt or soluble derivative thereof in combination with another anti-HIV agent selected from the group consisting of abacavir, zidovudine, BILA 1906, BILA 2185, BM+51.0836: triazoloisoindolinone derivative, BMS 186,318: aminodiol derivative HIV-1 protease inhibitor, d4API, stavudine, efavirenz, HBY097, HEPT, KNI-272, L-697,593, L-735,524, L-697,661, L-FDDC, L-FDOC, nevirapine, foscarnet, PMEA, PMPA, Ro 31-8959, RPI-3121, SC-52151, SC-55389A, TIBO R82150, TIBO 82913, TSAO-m3T, U90152, UC: thiocarboxanilide derivatives, UC-781, UC-82, VB 11,328, amprenavir, XM 323, delaviridine, famciclovir, gancyclovir, penciclovir, indinavir, nelfinavir, ritonavir, saquinavir, DDI, DDC, Delaviridine, β-LddA, β-L-3'-azido-d5FC, carbovir, acyclovir, interferon, stavudine, (3'-azido-2',3'-dideoxy-5-methyl-cytidine), 3'-azido nucleosides, β-D-dioxolane nucleosides such as β-D-dioxolanylguanine (DXG), β-D-dioxolanyl-2,6-diaminopurine (DAPD), and β-D-dioxolanyl-6-chloropurine (ACP), D4T, FTC, 3TC, AZDU, and amprenavir.